4-4-07

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DOCKET NO.: JJCC-0003/JBP569 **PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:
Steven A. Shaya et al.

Application No.: 09/981,516

Filing Date: October 17, 2001

Confirmation No.: 7651

Group Art Unit: 3627

Examiner: Maria Teresa T. Thein

For: INTELLIGENT PERFORMANCE-BASED PRODUCT RECOMMMENDATION SYSTEM

EV940611742US

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DATE OF DEPOSIT: April 2, 2007

MS Appeal Brief - Patent
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF TRANSMITTAL
PURSUANT TO 37 CFR § 41.37

Transmitted herewith in triplicate is the APPEAL BRIEF in this application with respect to the Notice of Appeal received by The United States Patent and Trademark Office on **February 2, 2007**.

☐ Applicant(s) has previously claimed small entity status under 37 CFR § 41.37 .

☐ Applicant(s) by its/their undersigned attorney, claims small entity status under 37 CFR § 1.27 as:

- ☐ an Independent Inventor
- ☐ a Small Business Concern
- ☐ a Nonprofit Organization.

☐ Petition is hereby made under 37 CFR § 1.136(a) (fees: 37 CFR § 1.17(a)(1)-(4) to extend the time for response to the Office Action of to and through comprising an extension of the shortened statutory period of month(s).

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	SMALL ENTITY		NOT SMALL ENTITY	
	RATE	FEE	RATE	FEE
☒ APPEAL BRIEF FEE	$250	$	$500	$500.00
☐ ONE MONTH EXTENSION OF TIME	$60	$	$120	$0
☐ TWO MONTH EXTENSION OF TIME	$225	$	$450	$0
☐ THREE MONTH EXTENSION OF TIME	$510	$	$1020	$0
☐ FOUR MONTH EXTENSION OF TIME	$795	$	$1590	$0
☐ FIVE MONTH EXTENSION OF TIME	$1080	$	$2160	$0
☐ LESS ANY EXTENSION FEE ALREADY PAID	minus	($)	minus	($0)
TOTAL FEE DUE		$0		$500.00

☒ The Commissioner is hereby requested to grant an extension of time for the appropriate length of time, should one be necessary, in connection with this filing or any future filing submitted to the U.S. Patent and Trademark Office in the above-identified application during the pendency of this application. The Commissioner is further authorized to charge any fees related to any such extension of time to Deposit Account 23-3050. This sheet is provided in duplicate.

☐ A check in the amount of **$ .00** is attached. Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.

☒ Please charge Deposit Account No. 23-3050 in the amount of **$500.00**. This sheet is attached in duplicate.

☒ The Commissioner is hereby authorized to charge any deficiency or credit any overpayment of the fees associated with this communication to Deposit Account No. 23-3050.

Date: April 2, 2007

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For: **INTELLIGENT PERFORMANCE-BASED PRODUCT RECOMMENDATION SYSTEM**

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Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

APPELLANT'S BRIEF PURSUANT TO 37 C.F.R. § 41.37

This brief is being filed in support of Appellant's appeal from the rejections of claims 1-29 And 103 dated 11/02/2006. A Notice of Appeal was filed on 02/02/2007.

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TABLE OF AUTHORITIES

FEDERAL CASES

FEDERAL STATUTES

MISCELLANEOUS

I. REAL PARTY-IN-INTEREST

Johnson & Johnson Consumer Companies (Skillman, New Jersey, United States of America) by virtue of assignment from the inventors recorded March 5, 2002 at Reel 012666 and Frame 0502.

II. RELATED APPEALS AND INTERFERENCES

The Applicants, the Applicants' legal representative and the real party-in-interest are unaware of any appeals or interferences that are related to this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are twenty-four (24) claims pending in this Application.

B. Current Status of Claims

Claims 1-23 and 103 are pending.

Claims 24-102 were subject to a restriction requirement and have been cancelled without prejudice.

There are no claims that have been withdrawn from consideration but have not been canceled.

No claims have been allowed.

Claims 1-23 and 103 have been rejected.

C. Claims on Appeal

Claims 1-23 and 103 are the subject of this appeal. There are two independent claims (1 and 103), and twenty-two dependent claims (2-23). They are reproduced in the Claims Appendix to this Brief.

IV. STATUS OF AMENDMENTS

No amendments to claims 1-23 and 103 have been filed subsequent to the final rejections dated November 2, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim No.	Summary	Exemplary Specification Pages and Figures[1]
1	In exemplary aspects, a method of formulating individualized product recommendations by receiving a requirement from a consumer regarding a target substrate to be addressed by a product, classifying the consumer in a population of consumers who previously used a relevant product in connection with a similar substrate and who are similar to the consumer, determining a likelihood that relevant products will address the requirement with a certain level of success when used in connection with the target substrate by the consumer, and recommending a subset of the relevant products to the consumer that have the likelihood of the certain level of success.	Figs. 7, 10, 12, 16, and 17A. Pages 4-8, 10-16.
27	In exemplary respects, the method of claim 1 further comprising receiving feedback from the consumer regarding use of previously recommended products and re-training the product recommendation engine based on the feedback.	Figs. 7, 12, 16, 17B, and 18. Pages 4-8, 10, 16-17.
28	In exemplary respects, the method of claim 1 where the target substrate is the consumer's skin and the products are skin-care products.	Figs. 7, 10, 12, 16, and 17A. Pages 4-8, 10-16.
103	In exemplary aspects, a computer-readable medium having a program with computer-executable instructions for performing steps comprising receiving a requirement from a consumer regarding a target substrate to be	Figs. 3, 4, 7, 10, 11, 12, 13, and 17A. Pages 4-8, 10-16.

[1] Citations are to the published version of the Application.

	addressed by a product, classifying the consumer in a population of consumers who previously used a relevant product in connection with a similar substrate and who are similar to the consumer, determining a likelihood that relevant products will address the requirement with a certain level of success when used in connection with the target substrate by the consumer, and recommending a subset of the relevant products to the consumer that have the likelihood of the certain level of success.	

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The rejection of claims 1-4, 8, 13-27 and 103 under 35 U.S.C. § 102(e) as allegedly being anticipated by Herz (U.S. Pat. No. 6,029,195).

The rejection of claims 5-7 under 35 U.S.C. § 103(a) as allegedly being obvious over Herz (U.S. Pat. No. 6,029,195) in view of Bieganski (U.S. Pat. No. 6,412,021).

The rejection claims 9-12 under 35 U.S.C. § 103(a) of as allegedly being obvious over Herz (U.S. Pat. No. 6,029,195) in view of Hoske (U.S. Pat. No. 6,438,579).

The rejection of claims 28-29 under 35 U.S.C. § 103(a) as allegedly being obvious over Herz (U.S. Pat. No. 6,029,195) in view of Wilmott (U.S. Pat. No. 6,782,307).

A. ARGUMENT

Applicants disagree with the Examiner's conclusions regard Herz and the other cited references, and will demonstrate below that the rejections cannot stand for several reasons.

1. Herz Is Fundamentally Different From Applicants' Method and Medium

All of the Examiner's rejections rely on the alleged teachings of Herz. But the subject matter defined by Applicants' claims is fundamentally different than the system disclosed and described in Herz.

Herz discloses a system for identifying desirable target objects in an electronic media environment. The Herz system does this by first "automatically construct[ing] both a target

profile for each target object in the electronic media ... as well as a 'target profile interest summary' for each user" (Herz Abstract; col. 4, lines 55-58; col. 5, lines 6-14). "Target objects" are those "object[s] available for access by the user" in the "electronic media environment" (Herz Abstract; col. 4, lines 49-51). "Target profiles" represent the "target object's attributes" (Herz col. 4, lines 51-53; col. 6, lines 43-58). A "target profile interest summary" represents a "user's interest level in various types of target objects" in the electronic media environment; or in other words, consists of "a summary of digital profiles of target objects that a user likes and/or dislikes" (Herz Abstract; col. 4, lines 55-58; col. 5, lines 6-14). After the system automatically constructs the target profiles for each target object and the target profile interest summary for the user, the "system then evaluates the target profiles against the users' target profile interest summaries to generate a user-customized rank ordered listing of target objects most likely to be of **interest** to each user" (Herz Abstract; col. 1, lines 17-31; col. 5, lines 6-17). In some embodiments, Herz applies an algorithm to the target objects so that the **target objects are grouped** into clusters having similar attributes before evaluating the target profiles against a user's target profile **interest** summary (Herz col. 23, line 60-col. 26, line 10).

Applicants' claims, on the other hand, generate individualized product recommendations by assessing the likelihoods that certain products, when **used in connection with a target substrate** (*see* Evidence Appendix sect. C), will address a need or want **provided by a consumer** (Claims 1 and 103). The way in which Applicants' claims assess those likelihoods is by classifying the **consumer** (**not** the products or other "target objects") in a population of substantially similar persons who **used** products in connection with substantially similar substrates in the past, and determining likelihoods, **based on the classification** and the need or want to be addressed specified by the consumer, of how those and other products in the category will address the consumer's need or want if used in connection with the target substrate (*Id.*).

The "user" in Herz corresponds to the "consumer" in Applicants' claims, and the "target objects" in Herz correspond to the "products" in Applicants' claims. Hence, the system in Herz and Applicants' claims represent fundamentally different subject matter. **Nothing** in Herz corresponds to the "target substrate" in Applicants' claims, **nothing** in Herz corresponds to the consumer providing a need or want to be addressed by products when used in connection with the target substrate, **nothing** in Herz corresponds to classifying the consumer in a population of substantially similar persons who used products in the past, and

nothing in Herz corresponds to determining likelihoods (based on the classification and the need or want specified by the consumer) of how products in a product category would perform if used in connection with the consumer-designated target substrate.

Herz only teaches (and only contemplates) systems where objects' attributes (target profiles) and a user's **subjective interest level** in various types of target objects (target profile interest summary) are automatically compiled and compared to each other to see which target objects the user is most likely to have a **subjective interest in** (*see, e.g.,* Herz col. 18, lines 10-13: "A filtering system is a device that can search through many target objects and estimate a given user's **interest** in each target object , so as to identify those that are of greatest interest to the user"(emphasis added)). Herz completely fails to address or provide any teaching of recommending target objects to its users for use in connection with a target substrate based on the **past performance** of target objects **in connection with substantially similar substrates by substantially similar users.**

The critical shortcomings in systems like Herz (Applicants say "like" because Herz does not even contemplate recommending target objects for use by a consumer with a target substrate based on the past performance of products), which are solved by the subject matter in Applicants' claims, are set forth clearly in the Problem Summary section of Applicants' specification:

> [P]resent recommendation systems have significant shortcomings. For instance, many if not most of the products to be considered for a particular consumer may not have been used and rated by many other consumers thereby handicapping collaborative filtering based systems. Also, consumers often have great difficulty in knowing or determining whether some, all, or none of their needs are being met by a particular product he or she may be using. This is particularly true where the need being addressed by a product is characterized by an incremental response. Moreover, while existing systems may be helpful in some categories of products they are inappropriate where performance of the products being recommended is complex or even unknown. **Placing a high value on the ratings patterns of other consumers, even though similar in a social-statistical sense, fails to address the likelihood that the consumers may have disparate underlying conditions and problems to be addressed by a product, and that the condition or problem being treated by the product may respond quite differently.** In many categories the performance of products cannot be reliably predicted based on ratings patterns of other similar users, promises by the manufacturers thereof, or an examination of the ingredients or makeup of the products.
>
> Accordingly, **a need exists in the art for an individualized product recommendation system that does *not* rely primarily on consumer selection patterns but *rather* on product performance,**

optimized segmentation bases, and/or performance-based learning to render highly accurate product recommendations.

(Specification at paragraphs 29-30)(emphasis added).

2. Herz Does Not Anticipate Claims 1 and 103

Applicants will now demonstrate why particular assertions by the Examiner regarding Herz are at odds with Herz's actual disclosure and teachings.

In order to anticipate Applicants' claims, Herz must, by itself, disclose each limitation in Applicants' claims. *Nystrom v. Trex Co.*, 374 F.3d 1105, 1117-18 (Fed. Cir. 2004)(reversing summary judgment of anticipation because prior art reference failed to disclose each limitation of claim). Moreover, Herz's disclosure also must enable the full scope of Applicants' claims. *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 1306 (Fed. Cir. 2006)("In order to anticipate, a prior art reference must not only disclose all of the limitations of the claimed invention, but also be enabled")(citations omitted); *Smithkline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1342 (Fed. Cir. 2005)("For prior art to anticipate a claim it must be sufficient to enable one with ordinary skill in the art to practice the invention.")(quotations omitted). Herz fails to disclose each limitation of claims 1 and 103, and fails to enable the subject matter defined in claims 1 and 103, for at least the following reasons.

a) Herz Fails to Teach or Disclose "receiving a first set of data from a consumer," "receiving a first set of data [] regarding a substrate," and "receiving a first set of data [] that includes a requirement to be addressed by a product"

Claims 1 and 103 recite "receiving a first set of data **from a consumer** regarding a **target substrate** that includes a requirement to be addressed by a product." The Examiner has asserted that Herz meets these limitations by teaching the use of "target profiles" (Office Action at pp. 2-3, 8). But there are at least three problems with this assertion – 1) the target profiles in Herz are **not** received from a user, 2) the target profiles in Herz do **not** include a requirement (*i.e.*, a need or want) to be addressed by an object (product), and 3) the target profiles in Herz do **not** contain information regarding a substrate of interest to the user (target substrate).

Regarding the first point, the target profiles in Herz are not provided by the user, they are automatically created **by the system** (Herz col. 5, lines 6-9: "The **system** [] of the present

invention **automatically constructs** [] a target profile for each target object in the electronic media"). Thus, Herz fails to teach or disclose "receiving a first set of data from a consumer" as recited in claims 1 and 103.

Regarding the second point, the target profiles in Herz do not include a requirement to be addressed by its target objects; the target profiles only contain attributes of the target objects assigned by the system itself (Herz col. 4, lines 49-54: "a digitally represented profile indicating [a] target object's attributes is termed a 'target profile'"). Thus, Herz fails to teach or disclose "receiving a first set of data from a consumer [] that includes a requirement to be addressed by a product" as recited in claims 1 and 103.

Regarding the final point, the target substrate in Applicants' claims is separate and distinct from the products, and the target profiles in Herz do not contain information regarding items separate and distinct from the target objects such as a substrate; the target profiles only contain attributes of the target objects themselves (Herz col. 4, lines 49-54: "a digitally represented profile indicating [a] target object's attributes is termed a 'target profile'"). This is not surprising given that Herz fails to teach or disclose anything about recommending target objects to a user for use in connection with a target substrate, let alone recommending target objects for use with a target substrate in order to meet a requirement specified by the user as an input (*see supra* Herz Is Fundamentally Different From Applicants' Method and Medium).

Thus, Herz fails to teach or disclose "receiving a first set of data from a consumer," "receiving a first set of data [] regarding a substrate," and "receiving a first set of data [] that includes a requirement to be addressed by a product."

b) Herz Fails to Teach or Disclose "classifying the consumer [] in a population of consumers who previously used a product in the product category and who are substantially similar to the consumer"

Claims 1 and 103 recite "classifying the **consumer**, based on the inputs, in a population of consumers who previously used a product in the product category and who are substantially similar to the consumer." The Examiner has asserted that these limitations are met by the teachings of Herz at col. 4, lines 64-65; col. 5, lines 30-36; col. 6, lines 54-58; col. 12, lines 26-31; and col. 24, lines 42-67 (Office Action at pp. 3, 9-10: "Herz discloses a collection of target objects with similar profiles is termed a 'cluster' (col. 4, lines 64-65). In col. 24, lines 41-47, Herz discloses the clustering of **target objects** based on similarity of the users who like them or clusters users based on similarity of the target objects they like"). But

none of these citations teach "clustering users based on similarity of the target objects they like" or the "classifying the consumer" limitation recited in Applicants' claims.

At col. 4, lines 64-67, Herz simply states that "a collection of target objects with similar profiles, is termed a 'cluster,'" and that "an aggregate profile formed by averaging the attributes of all target objects in a cluster, [is] termed a 'cluster profile.'" This passage only teaches grouping similar **target objects** together for the purpose of assessing whether to recommend particular target objects to the user, **not** classifying the **user** (consumer) in a population of **users** (consumers) who are substantially similar to the **user** (consumer) for the purpose of assessing whether to recommend particular target objects to the user (consumer) as required in claims 1 and 103. **Nor** does this passage teach classifying the **user** (consumer) in a **population of users** (consumers) **who previously used a target object** (product) in a target object (product) category for the purpose of assessing whether to recommend particular target objects to the user (consumer) as required by claims 1 and 103.

The same is true of the other passages cited by the Examiner – they say and teach **nothing** about clustering or classifying the **user** of the system in a population of other **users** who previously used a target object in a category of target objects and who are substantially similar to the user for the purpose of assessing whether to recommend particular target objects to the user (*See* Herz col. 23, line 61-col. 24, line 67: "A method for defining the distance between any pair of target objects was disclosed above. Given this distance measure, it is simple to apply a standard clustering algorithm [] to **group the target objects** [products] into a number of clusters, in such a way that **similar target objects [products] tend to be grouped** in the same cluster. ... Any of these basic types of clustering might be used by the system: 1) Association-based clustering, in which [target] profiles contain only associative attributes, and thus distance [between target objects] is defined by associations. ... 2) Content-based clustering, in which [target] profiles contain only non-associative attributes. ... 3) Uniform hybrid method, in which [target] profiles may contain both associative and non-associative attributes. ... The distance [] between two profiles [] may be computed by the general similarity-measurement methods described earlier" (emphasis added); col. 5, lines 30-36: "**[T]arget objects can be grouped into clusters** based on their similarity to each other, ... and menus automatically generated for each cluster of target objects to allow users to navigate throughout the clusters and manually locate target objects of interest"; col. 6, lines 54-58: "Any of these attributes [individual data that describe a target object] ... may correlate with the quality of the target object, such as measures of its

popularity (how often it is accessed) or of user satisfaction (number of complaints received)"; col. 12, lines 26-31: "As **another example**, consider a domain where the **user is an advertiser** and the target objects are potential customers. The system might store the following attributes for each target object (potential customer). ... As always, the notion is that similar consumers buy similar products" (emphasis added)).

Thus, Herz fails to teach or disclose "classifying the **consumer** [user] [] in a population of **consumers** [users] who previously used a product in the product category and who are substantially similar to the consumer" as required by claims 1 and 103.

c) Herz Fails to Teach or Disclose "determining, based on the inputs and the classification of the consumer, a likelihood that the products in the product category will address the requirement [] when used in connection with the target substrate"

Claims 1 and 103 require "determining, based on the inputs and the classification of the consumer, a likelihood that the products in the product category will address the requirement [specified by the user] with a predefined level of success when used in connection with the target substrate." The Examiner has asserted that Herz meets these limitations by the teachings at "col. 5, lines 14-20; Figure 12; col. 6, lines 38-58; col. 7, lines 6-16; col. 7, lines 63-66" (Office Action at pp. 3, 10-11). But none of these citations in Herz teach the "determining [] a likelihood" limitation in Applicants' claims, which is explicitly tied to assessing the likelihood of addressing the requirement specified by the user when used in connection with the target substrate based on the classification of the consumer in a population of persons who previously used products in the product category in connection with substantially similar substrates.

For example, at col. 5, lines 14-20, Herz simply states that after the system automatically generates target profiles for the target objects and target profile interest summaries for the users, the "system then evaluates the target profiles against the users' target profile interest summaries to generate a user-customized rank ordered listing of target objects most likely to be of **interest** to each user." This passage teaches **nothing** about assessing the likelihood that target objects will address a requirement specified by the user when the target objects are used in connection with a target substrate.

Similarly, at col. 7, lines 6-16, Herz only states that a "second module uses interest feedback from users to construct a 'target profile interest summary' for each user, for example in the form of a 'search profile set' consisting of a plurality of search profiles, each

of which corresponds to a single topic of high interest for the user," and that the "system further includes a profile processing module which estimates each users' target profile interest summaries, for example by comparing target profiles of these target objects against the search profiles in users' search profile sets, and generates for each user a customized rank-ordered listing of target objects most likely to be of interest to that user." Again, this passage teaches nothing about assessing the likelihood that the target objects will address a requirement specified by the user when the target objects are used in connection with a target substrate. Nor do either of the foregoing passages teach anything about assessing the likelihood that a target object will address a requirement specified by the user when used in connection with a target substrate based on the classification of the user in a population of users who previously used target objects in a target object category in connection with substantially similar substrates.

The same holds true for the other portions of Herz cited by the Examiner in support of the assertion that Herz discloses the "determining [] a likelihood" limitation in Applicants' claims – **none** of them teaches assessing the likelihood that target objects will address a requirement specified by the user when the target objects are used in connection with a target substrate based on past performance of the target objects when used in connection with substantially similar substrates by substantially similar users. They relate only to assessing the likelihood that the user will have a subjective interest in the particular target object based on past subject interest in that or like objects (Figure 12: "illustrates in flow diagram form the process for determination of likelihood of **interest** by a specific user in a selected in a selected target object" but discloses no step where the system assesses the likelihood of whether a selected target object will satisfy a requirement specified by the user when the selected target object is used in connection with a target substrate specified by the user; col. 6, lines 38-58: "the information delivery process in the preferred embodiment is based on determining the similarity between a profile for the target object and the profiles of target objects for which the user (or a similar user) has provided positive feedback in the past. The individual data that describe a target object and constitute the target object's profile are herein termed 'attributes.' ... Attributes may include, but are not limited to, the following: (1) long pieces of text [], (2) short pieces of text [], (3) numeric measurements [], (4) associations with other types of objects []. Any of these attributes [] may correlate with the quality of the target object").

Accordingly, Herz fails to teach or disclose "determining, based on the inputs and the classification of the consumer, a likelihood that the products in the product category will address the requirement [] when used in connection with the target substrate."

3. Herz Does Not Anticipate Claims 2-4

a) Herz Does Not Teach or Disclose "receiving a concern about the substrate"

Claims 2-4 all require "receiving a concern about the substrate" from the consumer seeking individualized performance-based product recommendations. The examiner contends that Herz anticipates claims 2-4 because "Herz discloses receiving a concern about the substrate," citing col. 12, lines 27-30, 33-38; and col. 28, lines 55-63 (Office Action at pp. 3). But these citations to Herz disclose nothing about receiving a concern about a substrate from a consumer.

As noted in connection with claims 1 and 103 above, the target substrate in Applicants' claims is separate and distinct from the products, and the target profiles in Herz do not contain information regarding items separate and distinct from the target objects such as a substrate; the target profiles only contain attributes of the target objects themselves (Herz col. 4, lines 49-54: "a digitally represented profile indicating [a] target object's attributes is termed a 'target profile'"). Applicants also noted that Herz fails to teach or disclose anything about recommending target objects to a user for use in connection with a target substrate, let alone recommending target objects for use with a target substrate in order to meet a requirement specified by the user as an input (*see supra* Herz Is Fundamentally Different From Applicants' Method and Medium). Thus, Herz can not and does not teach or disclose the "receiving a concern about the substrate" limitation in Applicants' claims.

Moreover, the citations invoked by the Examiner mention absolutely nothing about "substrates" or "concerns about [a] substrate" (col. 12, lines 27-30, 33-38: "[C]onsider a domain where the user is an advertiser and the target objects are potential customers. The system might store the following attributes for each target object (potential customer). ... [D]iverse sorts of information are being used here to characterize consumers, from their consumption patterns to their literary tastes and psychological peculiarities. ... Diverse sorts of information can be used as [target object] attributes in other domains as well (as when physical, economic, psychological and interest-related questions are used to profile the applicants to a dating service, which is indeed a possible domain for the present system)";

col. 28, lines 55-63: "In a variation, each user's user profile is subdivided into a set of long-term attributes, such as demographic characteristics, and a set of short-term attributes that help to identify the user's temporary desires and emotional state, such as the textual or multiple choice answers to questions whose answers reflect the user's mood").

Thus, Herz fails to teach or disclose ""receiving a concern about the substrate" from the consumer (or "user" in terms of Herz's system) as recited in Applicants' claims 2-4.[2]

4. Wilmott Is Not Prior Art To Applicants' Inventions and Fails To Render Claims 28 and 29 Obvious

The Examiner has rejected claims 28 and 29 as allegedly being obvious over Herz in view of Wilmott. While these rejections cannot stand for the reasons noted above regarding the deficiencies in Herz, the rejections also cannot stand because Wilmott is not prior art to this Application.

a) Wilmott's 102(e) Date is After the Priority Date of this Application

Applicants dispute that Wilmott is prior art to the claims in this Application. The claims in this Application have a priority date of at least as early as 10-18-2000 by virtue of the benefit claim to provisional patent application no. 60/241,405 (*see* paragraph 001 in Applicants' specification). Wilmott on the other hand, is entitled to a priority date of only 01-31-2001 or later for at least the following two reasons.

The current version of § 102(e), which Applicants contend is inapplicable to Wilmott (see reason 2 below), states that "[a] person shall be entitled to a patent unless – [] (e) the invention was described in [] (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) [i.e., the PCT] shall have the effect for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language." 35 U.S.C. § 102(e). Wilmott is a U.S. patent granted on an application for patent filed in the U.S. as a continuation of PCT application no. PCT/US01/03168, which was filed on 01-31-2001. The PCT application

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[2] For the same reasons, Herz fails to disclose "receiving a severity of the concern" from the consumer in Applicants' claim 3, and fails to disclose "receiving an importance of the concern" from the consumer in Applicants' claim 4. (*see* Office Action at p. 3).

appears to have designated the U.S. and have been published in the English language. Thus, under the current version of the statute, assuming for now that the it applies, Wilmott would initially appear to be prior art under §102(e) as of 01-31-2001, which is after the priority date of Applicants' claims.

Applicants therefore presume that the Examiner took the position that Wilmott is prior art under §102(e) as of the date(s) of the three provisional applications that Wilmott claims the benefit of, which were filed on 1-31-2000, 3-23-2000, and 7-7-2000 respectively. However, that position is an incorrect application of both the current and immediately preceding versions of §102(e).

First, the operation of §102(e) is subject to the provisions of 35 U.S.C. §§363 *and* 119(e)(1), and §119(e)(1) precludes utilizing the Wilmott provisional application filing dates under §102(e). Section 363 states that "[a]n international application designating the United States shall have the effect, from its international filing date under Article 11 of the [PCT], of a national application for patent regularly filed in the Patent and Trademark Office except as otherwise provided in section 102(e) of this title." 35 U.S.C. §363. However, §119(e)(1) states that "[a]n *application* for patent filed under ... section 363 of this title for an invention disclosed ... in a provisional application filed under section 111(b) ... shall have the same effect, as to such invention, as though filed on the date of the provisional application ... **if the application** for patent filed **under ... section 363 of this title** [i.e., the international application] ... **contains ... a specific reference to the provisional application**." *Id.* (emphasis added). The international application that Wilmott is based upon failed to contain "a specific reference to" any of the three provisional applications (*see* WO 01/058238 A2). Accordingly, Wilmott's §102(e) date under the current version of the statute is 01-31-2001 or later, which results in Wilmott not being prior art to this Application.

Second, even if one were to assume that the Wilmott international application complied with §119(e)(1) so as to allow reliance on the three Wilmott provisionals for §102(e) purposes, which it did not, the combination of §119(e)(1), the enabling legislation for the current version of §102(e), and the immediately preceding version of §102(e) precludes utilizing the dates of the three Wilmott provisional applications under §102(e).[3]

In November 2002, §13205 of Public Law 107-273 implemented the current version of §102(e). Pub. L. 107-273, 116 Stat. 1758 (11-2-2002)(excerpts attached in section A of

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[3] The portions of 35 U.S.C. §119(e)(1) relevant to this Reply and noted above have been in effect since 1995. Pub. L. 103-465.

Evidence Appendix). As noted above, in order for Wilmott to be considered prior art to Applicants' claims, Wilmott must be entitled to claim the benefit of the three Wilmott provisional applications under §119(e)(1). Assuming for purposes of argument that §119(e)(1) is satisfied, which it is not, then the Wilmott international application is considered to have been filed on any of the three provisional filing dates – 1-31-2000, 3-23-2000, or 7-7-2000. This is, however, an impermissible application of the statute because the legislation that implemented the current version of §102(e) forbids it. Section 3205 of Public Law No. 107-273 explicitly states that "**Patents resulting from an international application filed before November 29, 2000** ... shall **not** be effective as prior art as of the filing date of the international application; however such patents shall be effective as prior art in accordance with section 102(e) in effect on November 28, 2000." *Id.* (emphasis added). Thus, Wilmott cannot be, and is not, prior art to Applicants' claims under the current version of §102(e).

Nor is Wilmott prior art to Applicants' claims under the immediately preceding version of §102(e). That version of §102(e) provided that a person shall be entitled to a patent unless:

> "The invention was described in-- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a)."

Pub. L. 106-113, 113 Stat. 1501 §4505 (11-29-1999)(excerpts attached in section B of Evidence Appendix).

Under this earlier version of §102(e), U.S. patents based on international applications were only afforded §102(e) dates as of the U.S. application filing date, not the priority date that the international application itself was entitled to. *Id.* Wilmott's U.S. filing date was 10-1-2001, well after Applicants' priority date of 10-18-2000. Accordingly, Wilmott is not prior art to Applicants' claims.

5. Other Pending Claims

Because all of the other pending claims in this Application depend on claim 1, and the rejection of claim 1 cannot stand for at least the reasons noted in detail above, none of the rejections of the other claims can stand either.

VII. CONCLUSION

Unlike Herz, the subject matter recited in Applicant's claims does not simply recommend products (or target objects) to a consumer (or user) because it determines there is a likelihood that the consumer (or user) will be subjectively interested in those products (or target objects) because they are similar to products (or target objects) the consumer or similar consumers (or user(s)) was or were subjectively interested in such products (or target objects) before. The subject matter defined by Applicants' claims recommends products to a consumer because it determines there is a certain likelihood that the products will address a requirement specified by the consumer when used in connection with a specified target substrate, and that likelihood is based on an analysis of how particular products actually performed when used in connection with substantially similar substrates by consumers who were substantially similar to, or the same as, the consumer him- or herself in the past.

The rejections, which are all based on Herz, therefore cannot stand. Applicants therefore request that the Examiner's rejections be reversed and that all pending claims be allowed.

Date: April 2, 2007

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CLAIMS APPENDIX

1. (Previously Presented) A method of formulating individualized product recommendations, comprising:

receiving a first set of data from a consumer regarding a target substrate that includes a requirement to be addressed by a product; and

generating a set of individualized product recommendations for the consumer from a plurality of products within a product category with the assistance of one or more computing devices, the generating comprising:

feeding the first set of data as inputs into an intelligent performance-based product recommendation engine;

classifying the consumer, based on the inputs, in a population of consumers who previously used a product in the product category in connection with a substantially similar substrate and who are substantially similar to the consumer;

determining, based on the inputs and the classification of the consumer, a likelihood that the products in the product category will address the requirement with a predefined level of success when used in connection with the target substrate; and

selecting a set of products from the product category having a predefined likelihood of successfully addressing the requirement, the selected set of products comprising the set of individualized product recommendations.

2. (Original) The method of claim 1 wherein the receiving a first set of data step comprises receiving a concern about the substrate.

3. (Original) The method of claim 2 further comprising receiving a severity of the concern.

4. (Original) The method of claim 2 further comprising receiving an importance of the concern.

5. (Original) The method of claim 1 further comprising receiving a second set of data from the consumer, the second set of data comprising historical product data, and wherein the first and second sets of data comprise the inputs into the product

recommendation engine.

6. (Original) The method of claim 5 wherein the receiving a second set of historical product data step comprises receiving performance data for products used by the consumer in the past.

7. (Original) The method of claim 5 wherein the receiving the second set of historical product data step comprises receiving preference data for products used by the consumer in the past.

8. (Original) The method of claim 1 further comprising receiving a third set of data from the consumer, the third set of data comprising personal profile information about the consumer, and wherein the first and third sets of data comprise the inputs into the product recommendation engine.

9. (Previously Presented) The method of claim 1 wherein the classifying and determining steps comprise operating on the inputs with a neural network.

10. (Previously Presented) The method of claim 1 wherein the classifying and determining steps comprise operating on the inputs with a collaborative filter.

11. (Previously Presented) The method of claim 1 wherein the classifying and determining steps comprise operating on the inputs with a content-based filter.

12. (Previously Presented) The method of claim 1 wherein the classifying and determining steps comprise operating on the inputs with a cascaded content-based filter and collaborative filter.

13. (Previously Presented) The method of claim 1 wherein the set of individualized product recommendations comprises a first list of products and a scored predicted performance utility for each listed product.

14. (Previously Presented) The method of claim 1 wherein the set of individualized product recommendations comprises a first list of top-N products and a scored predicted performance utility for each listed product.

15. (Previously Presented) The method of claim 1 wherein the set of individualized product recommendations comprises a first list of products and a scored predicted preference utility for each listed product.

16. (Previously Presented) The method of claim 1 wherein the set of individualized product recommendations comprises a first list of top-N products and a scored predicted product preference utility for each listed product.

17. (Previously Presented) The method of claim 1 wherein the set of individualized product recommendations comprises a first list of products and a purchase price for each listed product.

18. (Previously Presented) The method of claim 1 further comprising generating ancillary information from the product recommendation engine inputs.

19. (Previously Presented) The method of claim 18 wherein the ancillary information comprises information regarding effects of at least one of the products.

20. (Previously Presented) The method of claim 18 wherein the ancillary information comprises information regarding the condition of the target substrate relative to a designated population of consumers.

21. (Original) The method of claim 1 further comprising:
communicating the set of individualized product recommendations to the consumer.

22. (Previously Presented) The method of claim 21 wherein the communicating step comprises generating and delivering a web page containing the recommendations to the consumer.

23. (Previously Presented) The method of claim 1 further comprising:

receiving feedback from the consumer regarding use of a product in connection with the target substrate.

24. (Original) The method of claim 23 wherein the receiving feedback step comprises receiving feedback from the consumer regarding use of a previously recommended product.

25. (Original) The method of claim 23 wherein the receiving feedback step comprises receiving preference data regarding the product.

26. (Original) The method of claim 23 wherein the receiving feedback comprises receiving performance data regarding the product.

27. (Original) The method of claim 23 further comprising:

re-training the product recommendation engine based on the feedback.

28. (Original) The method of claim 1 wherein the receiving a first set of data from a consumer step comprises receiving a first set of data about the consumer's skin, and the generating a set of individualized product recommendations for the consumer step comprises generating a set of individualized product recommendations from a plurality of skin-care products.

29. (Original) The method of claim 1 further comprising receiving a payment from the consumer.

30 -102. (Cancelled)

103. (Previously Presented) A computer-readable medium having a program with computer-executable instructions for performing steps comprising:

receiving a first set of data from a consumer regarding a target substrate that includes a requirement to be addressed by a product; and

generating a set of individualized product recommendations for the consumer

from a plurality of products within a product category by:

feeding the first set of data as inputs into an intelligent performance-based product recommendation engine;

classifying the consumer, based on the inputs, in a population of consumers who are substantially similar to the consumer and who previously used a product in the product category in connection with a substantially similar substrate;

determining, based on the inputs and the classification of the consumer, a likelihood that the products in the product category will address the requirement with a predefined level of success when used in connection with the target substrate; and

selecting a set of products from the product category having a predefined likelihood of successfully addressing the requirement, the selected set of products comprising the set of individualized product recommendations.

RELATED PROCEEDINGS APPENDIX

None.

EVIDENCE APPENDIX

A

21ST CENTURY DEPARTMENT OF JUSTICE APPROPRIATIONS AUTHORIZATION ACT

Public Law 107–273
107th Congress

An Act

Nov. 2, 2002
[H.R. 2215]

To authorize appropriations for the Department of Justice for fiscal year 2002, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

21st Century Department of Justice Appropriations Authorization Act.

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "21st Century Department of Justice Appropriations Authorization Act".

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

DIVISION A—21ST CENTURY DEPARTMENT OF JUSTICE APPROPRIATIONS AUTHORIZATION ACT

TITLE I—AUTHORIZATION OF APPROPRIATIONS FOR FISCAL YEARS 2002 AND 2003

SEC. 101. SPECIFIC SUMS AUTHORIZED TO BE APPROPRIATED FOR FISCAL YEAR 2002.

There are authorized to be appropriated for fiscal year 2002, to carry out the activities of the Department of Justice (including any bureau, office, board, division, commission, subdivision, unit, or other component thereof), the following sums:

(1) GENERAL ADMINISTRATION.—For General Administration: $92,668,000.

(2) ADMINISTRATIVE REVIEW AND APPEALS.—For Administrative Review and Appeals: $173,647,000 for administration of pardon and clemency petitions and for immigration-related activities.

(3) OFFICE OF INSPECTOR GENERAL.—For the Office of Inspector General: $50,735,000, which shall include for each such fiscal year, not to exceed $10,000 to meet unforeseen emergencies of a confidential character.

(4) GENERAL LEGAL ACTIVITIES.—For General Legal Activities: $549,176,000, which shall include for each such fiscal year—

(A) not less than $4,000,000 for the investigation and prosecution of denaturalization and deportation cases involving alleged Nazi war criminals; and

(B) not to exceed $20,000 to meet unforeseen emergencies of a confidential character.

(5) ANTITRUST DIVISION.—For the Antitrust Division: $130,791,000.

(6) UNITED STATES ATTORNEYS.—For United States Attorneys: $1,353,968,000, which shall include not less than $10,000,000 for the investigation and prosecution of intellectual property crimes, including software counterfeiting crimes and

"(2) may, subject to subsection (c), be a party to any appeal taken by the patent owner under the provisions of section 134 or sections 141 through 144.".

(b) APPEAL TO BOARD OF PATENT APPEALS AND INTERFERENCES.—Section 134(c) of title 35, United States Code, is amended by striking the last sentence.

(c) APPEAL TO COURT OF APPEALS FOR THE FEDERAL CIRCUIT.—Section 141 of title 35, United States Code, is amended in the third sentence by inserting ", or a third-party requester in an inter partes reexamination proceeding, who is" after "patent owner".

(d) EFFECTIVE DATE.—The amendments made by this section apply with respect to any reexamination proceeding commenced on or after the date of enactment of this Act. 35 USC 134 note.

Subtitle B—Intellectual Property and High Technology Technical Amendments

Intellectual Property and High Technology Technical Amendments Act of 2002. 35 USC 1 note.

SEC. 13201. SHORT TITLE.

This subtitle may be cited as the "Intellectual Property and High Technology Technical Amendments Act of 2002".

SEC. 13202. CLARIFICATION OF REEXAMINATION PROCEDURE ACT OF 1999; TECHNICAL AMENDMENTS.

(a) OPTIONAL INTER PARTES REEXAMINATION PROCEDURES.—Title 35, United States Code, is amended as follows:

(1) Section 311 is amended—

(A) in subsection (a), by striking "person" and inserting "third-party requester"; and

(B) in subsection (c), by striking "Unless the requesting person is the owner of the patent, the" and inserting "The".

(2) Section 312 is amended—

(A) in subsection (a), by striking the second sentence; and

(B) in subsection (b), by striking ", if any".

(3) Section 314(b)(1) is amended—

(A) by striking "(1) This" and all that follows through "(2)" and inserting "(1)";

(B) by striking "the third-party requester shall receive a copy" and inserting "the Office shall send to the third-party requester a copy"; and

(C) by redesignating paragraph (3) as paragraph (2).

(4) Section 315(c) is amended by striking "United States Code,".

(5) Section 317 is amended—

(A) in subsection (a), by striking "patent owner nor the third-party requester, if any, nor privies of either" and inserting "third-party requester nor its privies"; and

(B) in subsection (b), by striking "United States Code,".

(b) CONFORMING AMENDMENTS.—

(1) APPEAL TO THE BOARD OF PATENT APPEALS AND INTERFERENCES.—Subsections (a), (b), and (c) of section 134 of title 35, United States Code, are each amended by striking "administrative patent judge" each place it appears and inserting "primary examiner".

(2) PROCEEDING ON APPEAL.—Section 143 of title 35, United States Code, is amended by amending the third sentence to

read as follows: "In an ex parte case or any reexamination case, the Director shall submit to the court in writing the grounds for the decision of the Patent and Trademark Office, addressing all the issues involved in the appeal. The court shall, before hearing an appeal, give notice of the time and place of the hearing to the Director and the parties in the appeal.".

(c) CLERICAL AMENDMENTS.—

(1) Section 4604(a) of the Intellectual Property and Communications Omnibus Reform Act of 1999, as enacted by section 1000(a)(9) of Public Law 106–113, is amended by striking "Part 3" and inserting "Part III".

35 USC 311–318.

(2) Section 4604(b) of that Act is amended by striking "title 25" and inserting "title 35".

Applicability.
35 USC 134 note.

(d) EFFECTIVE DATE.—The amendments made by section 4605 (b), (c), and (e) of the Intellectual Property and Communications Omnibus Reform Act, as enacted by section 1000(a)(9) of Public Law 106–113, shall apply to any reexamination filed in the United States Patent and Trademark Office on or after the date of enactment of Public Law 106–113.

SEC. 13203. PATENT AND TRADEMARK EFFICIENCY ACT AMENDMENTS.

(a) DEPUTY COMMISSIONER.—

(1) Section 17(b) of the Act of July 5, 1946 (commonly referred to as the "Trademark Act of 1946") (15 U.S.C. 1067(b)), is amended by inserting "the Deputy Commissioner," after "Commissioner,".

(2) Section 6(a) of title 35, United States Code, is amended by inserting "the Deputy Commissioner," after "Commissioner,".

(b) PUBLIC ADVISORY COMMITTEES.—Section 5 of title 35, United States Code, is amended—

(1) in subsection (i), by inserting ", privileged," after "personnel"; and

(2) by adding at the end the following new subsection:

"(j) INAPPLICABILITY OF PATENT PROHIBITION.—Section 4 shall not apply to voting members of the Advisory Committees.".

(c) MISCELLANEOUS.—Section 153 of title 35, United States Code, is amended by striking "and attested by an officer of the Patent and Trademark Office designated by the Director,".

SEC. 13204. DOMESTIC PUBLICATION OF FOREIGN FILED PATENT APPLICATIONS ACT OF 1999 AMENDMENTS.

Section 154(d)(4)(A) of title 35, United States Code, as in effect on November 29, 2000, is amended—

(1) by striking "on which the Patent and Trademark Office receives a copy of the" and inserting "of"; and

(2) by striking "international application" the last place it appears and inserting "publication".

SEC. 13205. DOMESTIC PUBLICATION OF PATENT APPLICATIONS PUBLISHED ABROAD.

Subtitle E of title IV of the Intellectual Property and Communications Omnibus Reform Act of 1999, as enacted by section 1000(a)(9) of Public Law 106–113, is amended as follows:

35 USC 102.

(1) Section 4505 is amended to read as follows:

"SEC. 4505. PRIOR ART EFFECT OF PUBLISHED APPLICATIONS.

"Section 102(e) of title 35, United States Code, is amended to read as follows:

"'(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language; or'.".

(2) Section 4507 is amended—

(A) in paragraph (1), by striking "Section 11" and inserting "Section 10"; 35 USC 10.

(B) in paragraph (2), by striking "Section 12" and inserting "Section 11". 35 USC 11.

(C) in paragraph (3), by striking "Section 13" and inserting "Section 12"; 35 USC 12.

(D) in paragraph (4), by striking "12 and 13" and inserting "11 and 12";

(E) in section 374 of title 35, United States Code, as amended by paragraph (10), by striking "confer the same rights and shall have the same effect under this title as an application for patent published" and inserting "be deemed a publication"; and 35 USC 374.

(F) by adding at the end the following:

"(12) The item relating to section 374 in the table of contents for chapter 37 of title 35, United States Code, is amended to read as follows:

"'374. Publication of international application.'".

(3) Section 4508 is amended to read as follows: 35 USC 10 note.

"SEC. 4508. EFFECTIVE DATE.

"Except as otherwise provided in this section, sections 4502 through 4504 and 4506 through 4507, and the amendments made by such sections, shall be effective as of November 29, 2000, and shall apply only to applications (including international applications designating the United States) filed on or after that date. The amendments made by section 4504 shall additionally apply to any pending application filed before November 29, 2000, if such pending application is published pursuant to a request of the applicant under such procedures as may be established by the Director. Except as otherwise provided in this section, the amendments made by section 4505 shall be effective as of November 29, 2000 and shall apply to all patents and all applications for patents pending on or filed after November 29, 2000. Patents resulting from an international application filed before November 29, 2000 and applications published pursuant to section 122(b) or Article 21(2) of the treaty defined in section 351(a) resulting from an international application filed before November 29, 2000 shall not be effective as prior art as of the filing date of the international application; however, such patents shall be effective as prior art in accordance with section 102(e) in effect on November 28, 2000.".

SEC. 13206. MISCELLANEOUS CLERICAL AMENDMENTS.

(a) AMENDMENTS TO TITLE 35.—The following provisions of title 35, United States Code, are amended:

(1) Section 2(b) is amended in paragraphs (2)(B) and (4)(B), by striking ", United States Code".

(2) Section 3 is amended—

(A) in subsection (a)(2)(B), by striking "United States Code,";

(B) in subsection (b)(2)—

(i) in the first sentence of subparagraph (A), by striking ", United States Code";

(ii) in the first sentence of subparagraph (B)—

(I) by striking "United States Code,"; and

(II) by striking ", United States Code";

(iii) in the second sentence of subparagraph (B)—

(I) by striking "United States Code,"; and

(II) by striking ", United States Code." and inserting a period;

(iv) in the last sentence of subparagraph (B), by striking ", United States Code"; and

(v) in subparagraph (C), by striking ", United States Code"; and

(C) in subsection (c)—

(i) in the subsection caption, by striking ", UNITED STATES CODE"; and

(ii) by striking "United States Code,".

(3) Section 5 is amended in subsections (e) and (g), by striking ", United States Code" each place it appears.

(4) The table of chapters for part I is amended in the item relating to chapter 3, by striking "**before**" and inserting "**Before**".

(5) The item relating to section 21 in the table of contents for chapter 2 is amended to read as follows:

"21. Filing date and day for taking action.".

(6) The item relating to chapter 12 in the table of chapters for part II is amended to read as follows:

"12. Examination of Application ..... 131".

(7) The item relating to section 116 in the table of contents for chapter 11 is amended to read as follows:

"116. Inventors.".

(8) Section 154(b)(4) is amended by striking ", United States Code,".

(9) Section 156 is amended—

(A) in subsection (b)(3)(B), by striking "paragraphs" and inserting "paragraph";

(B) in subsection (d)(2)(B)(i), by striking "below the office" and inserting "below the Office"; and

(C) in subsection (g)(6)(B)(iii), by striking "submittted" and inserting "submitted".

(10) The item relating to section 183 in the table of contents for chapter 17 is amended by striking "of" and inserting "to".

(11) Section 185 is amended by striking the second period at the end of the section.

(12) Section 201(a) is amended—

(A) by striking "United States Code,"; and

(B) by striking "5, United States Code." and inserting "5.".

(13) Section 202 is amended—

(A) in subsection (b)(4), by striking "last paragraph of section 203(2)" and inserting "section 203(b)"; and

(B) in subsection (c)—

(i) in paragraph (4), by striking "rights;" and inserting "rights,"; and

(ii) in paragraph (5), by striking "of the United States Code".

(14) Section 203 is amended—

(A) in paragraph (2)—

(i) by striking "(2)" and inserting "(b)";

(ii) by striking the quotation marks and comma before "as appropriate"; and

(iii) by striking "paragraphs (a) and (c)" and inserting "paragraphs (1) and (3) of subsection (a)"; and

(B) in the first paragraph—

(i) by striking "(a)", "(b)", "(c)", and "(d)" and inserting "(1)", "(2)", "(3)", and "(4)", respectively; and

(ii) by striking "(1." and inserting "(a)".

(15) Section 209 is amended in subsections (d)(2) and (f), by striking "of the United States Code".

(16) Section 210 is amended—

(A) in subsection (a)—

(i) in paragraph (11), by striking "5901" and inserting "5908"; and

(ii) in paragraph (20) by striking "178(j)" and inserting "178j"; and

(B) in subsection (c)—

(i) by striking "paragraph 202(c)(4)" and inserting "section 202(c)(4)"; and

(ii) by striking "title.." and inserting "title.".

(17) The item relating to chapter 29 in the table of chapters for part III is amended by inserting a comma after "**Patent**".

(18) The item relating to section 256 in the table of contents for chapter 25 is amended to read as follows:

"256. Correction of named inventor.".

(19) Section 294 is amended—

(A) in subsection (b), by striking "United States Code,"; and

(B) in subsection (c), in the second sentence by striking "court to" and inserting "court of".

(20) Section 371(d) is amended by adding at the end a period.

(21) Paragraphs (1), (2), and (3) of section 376(a) are each amended by striking the semicolon and inserting a period.

(b) OTHER AMENDMENTS.—

(1) Section 4732(a) of the Intellectual Property and Communications Omnibus Reform Act of 1999 is amended—

(A) in paragraph (9)(A)(ii), by inserting "in subsection (b)," after "(ii)"; and 35 USC 303.

35 USC 7 *et seq.*

(B) in paragraph (10)(A), by inserting after "title 35, United States Code," the following: "other than sections 1 through 6 (as amended by chapter 1 of this subtitle),".

35 USC 119.

(2) Section 4802(1) of that Act is amended by inserting "to" before "citizens".

(3) Section 4804 of that Act is amended—

35 USC 10.

(A) in subsection (b), by striking "11(a)" and inserting "10(a)"; and

35 USC 12.

(B) in subsection (c), by striking "13" and inserting "12".

35 USC 382.

(4) Section 4402(b)(1) of that Act is amended by striking "in the fourth paragraph".

SEC. 13207. TECHNICAL CORRECTIONS IN TRADEMARK LAW.

(a) AWARD OF DAMAGES.—Section 35(a) of the Act of July 5, 1946 (commonly referred to as the "Trademark Act of 1946") (15 U.S.C. 1117(a)), is amended by striking "a violation under section 43(a), (c), or (d)," and inserting "a violation under section 43(a) or (d),".

(b) ADDITIONAL TECHNICAL AMENDMENTS.—The Trademark Act of 1946 is further amended as follows:

(1) Section 1(d)(1) (15 U.S.C. 1051(d)(1)) is amended in the first sentence by striking "specifying the date of the applicant's first use" and all that follows through the end of the sentence and inserting "specifying the date of the applicant's first use of the mark in commerce and those goods or services specified in the notice of allowance on or in connection with which the mark is used in commerce.".

(2) Section 1(e) (15 U.S.C. 1051(e)) is amended to read as follows:

"(e) If the applicant is not domiciled in the United States the applicant may designate, by a document filed in the United States Patent and Trademark Office, the name and address of a person resident in the United States on whom may be served notices or process in proceedings affecting the mark. Such notices or process may be served upon the person so designated by leaving with that person or mailing to that person a copy thereof at the address specified in the last designation so filed. If the person so designated cannot be found at the address given in the last designation, or if the registrant does not designate by a document filed in the United States Patent and Trademark Office the name and address of a person resident in the United States on whom may be served notices or process in proceedings affecting the mark, such notices or process may be served on the Director.".

(3) Section 8(f) (15 U.S.C. 1058(f)) is amended to read as follows:

"(f) If the registrant is not domiciled in the United States, the registrant may designate, by a document filed in the United States Patent and Trademark Office, the name and address of a person resident in the United States on whom may be served notices or process in proceedings affecting the mark. Such notices or process may be served upon the person so designated by leaving with that person or mailing to that person a copy thereof at the address specified in the last designation so filed. If the person so designated cannot be found at the address given in the last designation, or if the registrant does not designate by a document filed in the United States Patent and Trademark Office the name

B

Public Law 106–113
106th Congress

An Act

Making consolidated appropriations for the fiscal year ending September 30, 2000, and for other purposes.

Nov. 29, 1999
[H.R. 3194]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums are appropriated, out of any money in the Treasury not otherwise appropriated, for the serveral departments, agencies, corporations and other organizational units of the Government for the fiscal year 2000, and for other purposes, namely:

DIVISION A

DISTRICT OF COLUMBIA APPROPRIATIONS

TITLE I—FISCAL YEAR 2000 APPROPRIATIONS

District of Columbia Appropriations Act, 1999.

FEDERAL FUNDS

FEDERAL PAYMENT FOR RESIDENT TUITION SUPPORT

For a Federal payment to the District of Columbia for a program to be administered by the Mayor for District of Columbia resident tuition support, subject to the enactment of authorizing legislation for such program by Congress, $17,000,000, to remain available until expended: *Provided*, That such funds may be used on behalf of eligible District of Columbia residents to pay an amount based upon the difference between in-State and out-of-State tuition at public institutions of higher education, usable at both public and private institutions of higher education: *Provided further*, That the awarding of such funds may be prioritized on the basis of a resident's academic merit and such other factors as may be authorized: *Provided further*, That if the authorized program is a nationwide program, the Mayor may expend up to $17,000,000: *Provided further*, That if the authorized program is for a limited number of States, the Mayor may expend up to $11,000,000: *Provided further*, That the District of Columbia may expend funds other than the funds provided under this heading, including local tax revenues and contributions, to support such program.

FEDERAL PAYMENT FOR INCENTIVES FOR ADOPTION OF CHILDREN

For a Federal payment to the District of Columbia to create incentives to promote the adoption of children in the District of Columbia foster care system, $5,000,000: *Provided*, That such funds shall remain available until September 30, 2001 and shall be used

all applications filed under section 111(a) of title 35, United States Code, on or after June 8, 1995, and all applications complying with section 371 of title 35, United States Code, that resulted from international applications filed on or after June 8, 1995; and

(2) do not apply to applications for design patents under chapter 16 of title 35, United States Code.

Subtitle E—Domestic Publication of Patent Applications Published Abroad

SEC. 4501. SHORT TITLE.

This subtitle may be cited as the "Domestic Publication of Foreign Filed Patent Applications Act of 1999".

SEC. 4502. PUBLICATION.

(a) PUBLICATION.—Section 122 of title 35, United States Code, is amended to read as follows:

"§ 122. Confidential status of applications; publication of patent applications

"(a) CONFIDENTIALITY.—Except as provided in subsection (b), applications for patents shall be kept in confidence by the Patent and Trademark Office and no information concerning the same given without authority of the applicant or owner unless necessary to carry out the provisions of an Act of Congress or in such special circumstances as may be determined by the Director.

"(b) PUBLICATION.—

"(1) IN GENERAL.—(A) Subject to paragraph (2), each application for a patent shall be published, in accordance with procedures determined by the Director, promptly after the expiration of a period of 18 months from the earliest filing date for which a benefit is sought under this title. At the request of the applicant, an application may be published earlier than the end of such 18-month period.

"(B) No information concerning published patent applications shall be made available to the public except as the Director determines.

"(C) Notwithstanding any other provision of law, a determination by the Director to release or not to release information concerning a published patent application shall be final and nonreviewable.

"(2) EXCEPTIONS.—(A) An application shall not be published if that application is—

"(i) no longer pending;

"(ii) subject to a secrecy order under section 181 of this title;

"(iii) a provisional application filed under section 111(b) of this title; or

"(iv) an application for a design patent filed under chapter 16 of this title.

"(B)(i) If an applicant makes a request upon filing, certifying that the invention disclosed in the application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing, the

application shall not be published as provided in paragraph (1).

"(ii) An applicant may rescind a request made under clause (i) at any time.

"(iii) An applicant who has made a request under clause (i) but who subsequently files, in a foreign country or under a multilateral international agreement specified in clause (i), an application directed to the invention disclosed in the application filed in the Patent and Trademark Office, shall notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.

"(iv) If an applicant rescinds a request made under clause (i) or notifies the Director that an application was filed in a foreign country or under a multilateral international agreement specified in clause (i), the application shall be published in accordance with the provisions of paragraph (1) on or as soon as is practical after the date that is specified in clause (i).

"(v) If an applicant has filed applications in one or more foreign countries, directly or through a multilateral international agreement, and such foreign filed applications corresponding to an application filed in the Patent and Trademark Office or the description of the invention in such foreign filed applications is less extensive than the application or description of the invention in the application filed in the Patent and Trademark Office, the applicant may submit a redacted copy of the application filed in the Patent and Trademark Office eliminating any part or description of the invention in such application that is not also contained in any of the corresponding applications filed in a foreign country. The Director may only publish the redacted copy of the application unless the redacted copy of the application is not received within 16 months after the earliest effective filing date for which a benefit is sought under this title. The provisions of section 154(d) shall not apply to a claim if the description of the invention published in the redacted application filed under this clause with respect to the claim does not enable a person skilled in the art to make and use the subject matter of the claim.

"(c) PROTEST AND PRE-ISSUANCE OPPOSITION.—The Director shall establish appropriate procedures to ensure that no protest or other form of pre-issuance opposition to the grant of a patent on an application may be initiated after publication of the application without the express written consent of the applicant.

"(d) NATIONAL SECURITY.—No application for patent shall be published under subsection (b)(1) if the publication or disclosure of such invention would be detrimental to the national security. The Director shall establish appropriate procedures to ensure that such applications are promptly identified and the secrecy of such inventions is maintained in accordance with chapter 17 of this title.".

(b) STUDY.—

(1) IN GENERAL.—The Comptroller General shall conduct a 3-year study of the applicants who file only in the United States on or after the effective date of this subtitle and shall provide the results of such study to the Judiciary Committees of the House of Representatives and the Senate.

(2) CONTENTS.—The study conducted under paragraph (1) shall—

(A) consider the number of such applicants in relation to the number of applicants who file in the United States and outside of the United States;

(B) examine how many domestic-only filers request at the time of filing not to be published;

(C) examine how many such filers rescind that request or later choose to file abroad;

(D) examine the status of the entity seeking an application and any correlation that may exist between such status and the publication of patent applications; and

(E) examine the abandonment/issuance ratios and length of application pendency before patent issuance or abandonment for published versus unpublished applications.

SEC. 4503. TIME FOR CLAIMING BENEFIT OF EARLIER FILING DATE.

(a) IN A FOREIGN COUNTRY.—Section 119(b) of title 35, United States Code, is amended to read as follows:

"(b)(1) No application for patent shall be entitled to this right of priority unless a claim is filed in the Patent and Trademark Office, identifying the foreign application by specifying the application number on that foreign application, the intellectual property authority or country in or for which the application was filed, and the date of filing the application, at such time during the pendency of the application as required by the Director.

"(2) The Director may consider the failure of the applicant to file a timely claim for priority as a waiver of any such claim. The Director may establish procedures, including the payment of a surcharge, to accept an unintentionally delayed claim under this section.

"(3) The Director may require a certified copy of the original foreign application, specification, and drawings upon which it is based, a translation if not in the English language, and such other information as the Director considers necessary. Any such certification shall be made by the foreign intellectual property authority in which the foreign application was filed and show the date of the application and of the filing of the specification and other papers.".

(b) IN THE UNITED STATES.—

(1) IN GENERAL.—Section 120 of title 35, United States Code, is amended by adding at the end the following: "No application shall be entitled to the benefit of an earlier filed application under this section unless an amendment containing the specific reference to the earlier filed application is submitted at such time during the pendency of the application as required by the Director. The Director may consider the failure to submit such an amendment within that time period as a waiver of any benefit under this section. The Director may establish procedures, including the payment of a surcharge, to accept

an unintentionally delayed submission of an amendment under this section.".

(2) RIGHT OF PRIORITY.—Section 119(e)(1) of title 35, United States Code, is amended by adding at the end the following: "No application shall be entitled to the benefit of an earlier filed provisional application under this subsection unless an amendment containing the specific reference to the earlier filed provisional application is submitted at such time during the pendency of the application as required by the Director. The Director may consider the failure to submit such an amendment within that time period as a waiver of any benefit under this subsection. The Director may establish procedures, including the payment of a surcharge, to accept an unintentionally delayed submission of an amendment under this subsection during the pendency of the application.".

SEC. 4504. PROVISIONAL RIGHTS.

Section 154 of title 35, United States Code, is amended—

(1) in the section caption by inserting "; **provisional rights**" after "**patent**"; and

(2) by adding at the end the following new subsection: "(d) PROVISIONAL RIGHTS.—

"(1) IN GENERAL.—In addition to other rights provided by this section, a patent shall include the right to obtain a reasonable royalty from any person who, during the period beginning on the date of publication of the application for such patent under section 122(b), or in the case of an international application filed under the treaty defined in section 351(a) designating the United States under Article 21(2)(a) of such treaty, the date of publication of the application, and ending on the date the patent is issued—

"(A)(i) makes, uses, offers for sale, or sells in the United States the invention as claimed in the published patent application or imports such an invention into the United States; or

"(ii) if the invention as claimed in the published patent application is a process, uses, offers for sale, or sells in the United States or imports into the United States products made by that process as claimed in the published patent application; and

"(B) had actual notice of the published patent application and, in a case in which the right arising under this paragraph is based upon an international application designating the United States that is published in a language other than English, had a translation of the international application into the English language.

"(2) RIGHT BASED ON SUBSTANTIALLY IDENTICAL INVENTIONS.—The right under paragraph (1) to obtain a reasonable royalty shall not be available under this subsection unless the invention as claimed in the patent is substantially identical to the invention as claimed in the published patent application.

"(3) TIME LIMITATION ON OBTAINING A REASONABLE ROYALTY.—The right under paragraph (1) to obtain a reasonable royalty shall be available only in an action brought not later than 6 years after the patent is issued. The right under paragraph (1) to obtain a reasonable royalty shall not be affected by the duration of the period described in paragraph (1).

"(4) REQUIREMENTS FOR INTERNATIONAL APPLICATIONS.—

"(A) EFFECTIVE DATE.—The right under paragraph (1) to obtain a reasonable royalty based upon the publication under the treaty defined in section 351(a) of an international application designating the United States shall commence on the date on which the Patent and Trademark Office receives a copy of the publication under the treaty of the international application, or, if the publication under the treaty of the international application is in a language other than English, on the date on which the Patent and Trademark Office receives a translation of the international application in the English language.

"(B) COPIES.—The Director may require the applicant to provide a copy of the international application and a translation thereof.".

SEC. 4505. PRIOR ART EFFECT OF PUBLISHED APPLICATIONS.

Section 102(e) of title 35, United States Code, is amended to read as follows:

"(e) The invention was described in—

"(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

"(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a); or".

SEC. 4506. COST RECOVERY FOR PUBLICATION.

The Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office shall recover the cost of early publication required by the amendment made by section 4502 by charging a separate publication fee after notice of allowance is given under section 151 of title 35, United States Code.

SEC. 4507. CONFORMING AMENDMENTS.

The following provisions of title 35, United States Code, are amended:

(1) Section 11 is amended in paragraph 1 of subsection (a) by inserting "and published applications for patents" after "Patents".

(2) Section 12 is amended—

(A) in the section caption by inserting "**and applications**" after "**patents**"; and

(B) by inserting "and published applications for patents" after "patents".

(3) Section 13 is amended—

(A) in the section caption by inserting "**and applications**" after "**patents**"; and

(B) by inserting "and published applications for patents" after "patents".

(4) The items relating to sections 12 and 13 in the table of sections for chapter 1 are each amended by inserting "and applications" after "patents".

(5) The item relating to section 122 in the table of sections for chapter 11 is amended by inserting "; publication of patent applications" after "applications".

(6) The item relating to section 154 in the table of sections for chapter 14 is amended by inserting "; provisional rights" after "patent".

(7) Section 181 is amended—

(A) in the first undesignated paragraph—

(i) by inserting "by the publication of an application or" after "disclosure"; and

(ii) by inserting "the publication of the application or" after "withhold";

(B) in the second undesignated paragraph by inserting "by the publication of an application or" after "disclosure of an invention";

(C) in the third undesignated paragraph—

(i) by inserting "by the publication of the application or" after "disclosure of the invention"; and

(ii) by inserting "the publication of the application or" after "withhold"; and

(D) in the fourth undesignated paragraph by inserting "the publication of an application or" after "and" in the first sentence.

(8) Section 252 is amended in the first undesignated paragraph by inserting "substantially" before "identical" each place it appears.

(9) Section 284 is amended by adding at the end of the second undesignated paragraph the following: "Increased damages under this paragraph shall not apply to provisional rights under section 154(d) of this title.".

(10) Section 374 is amended to read as follows:

"§ 374. Publication of international application

"The publication under the treaty defined in section 351(a) of this title, of an international application designating the United States shall confer the same rights and shall have the same effect under this title as an application for patent published under section 122(b), except as provided in sections 102(e) and 154(d) of this title.".

(11) Section 135(b) is amended—

(A) by inserting "(1)" after "(b)"; and

(B) by adding at the end the following:

"(2) A claim which is the same as, or for the same or substantially the same subject matter as, a claim of an application published under section 122(b) of this title may be made in an application filed after the application is published only if the claim is made before 1 year after the date on which the application is published.".

SEC. 4508. EFFECTIVE DATE.

Sections 4502 through 4507, and the amendments made by such sections, shall take effect on the date that is 1 year after

the date of the enactment of this Act and shall apply to all applications filed under section 111 of title 35, United States Code, on or after that date, and all applications complying with section 371 of title 35, United States Code, that resulted from international applications filed on or after that date. The amendments made by sections 4504 and 4505 shall apply to any such application voluntarily published by the applicant under procedures established under this subtitle that is pending on the date that is 1 year after the date of the enactment of this Act. The amendment made by section 4504 shall also apply to international applications designating the United States that are filed on or after the date that is 1 year after the date of the enactment of this Act.

Subtitle F—Optional Inter Partes Reexamination Procedure

SEC. 4601. SHORT TITLE.

This subtitle may be cited as the "Optional Inter Partes Reexamination Procedure Act of 1999".

SEC. 4602. EX PARTE REEXAMINATION OF PATENTS.

The chapter heading for chapter 30 of title 35, United States Code, is amended by inserting "**EX PARTE**" before "**REEXAMINATION OF PATENTS**".

SEC. 4603. DEFINITIONS.

Section 100 of title 35, United States Code, is amended by adding at the end the following new subsection:

"(e) The term 'third-party requester' means a person requesting ex parte reexamination under section 302 or inter partes reexamination under section 311 who is not the patent owner.".

SEC. 4604. OPTIONAL INTER PARTES REEXAMINATION PROCEDURES.

(a) IN GENERAL.—Part 3 of title 35, United States Code, is amended by adding after chapter 30 the following new chapter:

"CHAPTER 31—OPTIONAL INTER PARTES REEXAMINATION PROCEDURES

"§ 311. Request for inter partes reexamination

"(a) IN GENERAL.—Any person at any time may file a request for inter partes reexamination by the Office of a patent on the basis of any prior art cited under the provisions of section 301.

"(b) REQUIREMENTS.—The request shall—

"(1) be in writing, include the identity of the real party in interest, and be accompanied by payment of an inter partes reexamination fee established by the Director under section 41; and

C

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Dictionary.com Unabridged (v 1.1) – *Cite This Source*

sub·strate [**suhb**-streyt] Pronunciation Key - Show IPA Pronunciation

-noun

1. a substratum.
2. *Biochemistry.* the substance acted upon by an enzyme.
3. *Electronics.* a supporting material on which a circuit is formed or fabricated.

[Origin: 1570–80; var. of SUBSTRATUM]

Dictionary.com Unabridged (v 1.1)
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American Heritage Dictionary – *Cite This Source*

sub·strate (sŭb'strāt') Pronunciation Key

n.

1. The material or substance on which an enzyme acts.

4. *Linguistics* An indigenous language that contributes features to the language of an invading people who impose their language on the indigenous population.

[From **substratum**.]

WordNet – Cite This Source
substrate

noun
1. the substance that is acted upon by an enzyme or ferment
2. a surface on which an organism grows or is attached; "the gardener talked about the proper substrate for acid-loving plants"
3. any stratum or layer lying underneath another
4. an indigenous language that contributes features to the language of an invading people who impose their language on the indigenous population; "the Celtic languages of Britain are a substrate for English"

The American Heritage Science Dictionary – Cite This Source

substrate (sŭb'strāt') Pronunciation Key

1. The material or substance on which an enzyme acts. See more at enzyme.
2. The surface on or in which plants, algae, or certain animals, such as barnacles or clams, live or grow. A substrate may serve as a source of food for an organism or simply provide support.

American Heritage Stedman's Medical Dictionary – Cite This Source

1. The material or substance on which an enzyme acts.
2. A surface on which an organism grows or is attached.

Merriam-Webster's Medical Dictionary - *Cite This Source*
Main Entry: **sub·strate**
Pronunciation: 's&b-"strAt
Function: *noun*
1 : SUBSTRATUM 1
2 : the base on which an organism lives
3 : a substance acted upon (as by an enzyme)

Free On-line Dictionary of Computing - *Cite This Source*
substrate *hardware*
The body or base layer of an integrated circuit, onto which other layers are deposited to form the circuit. The substrate is usually Silicon, though Sapphire is used for certain applications, particularly military, where radiation resistance is important. The substrate is originally part of the wafer from which the die is cut. It is used as the electrical ground for the circuit.
(1996-04-07)

On-line Medical Dictionary - *Cite This Source*
substrate

substrate: in CancerWEB's On-line Medical Dictionary

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